# Sexually Transmitted Disease in the City of St. Louis 2005-2009

City of St Louis

Department of Health

June 2010



## Sources

Prepared by:

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Data Sources: Missouri Department of Health and Senior Services STD-MIS (unless otherwise noted)

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Questions regarding this report may be directed to: Kelly Krahl Zara, MPH Epidemiologist krahlk@stlouiscity.com

## The Cases

- 73.3% of Chlamydia and 67.1% of Gonorrhea cases in St. Louis City are among 15-24 year olds in 2009
- Over 90% of Chlamydia and Gonorrhea cases occur among African Americans (taken among total cases with known race)
- Future infertility is a serious concern for untreated STD/STI infection in youth and young adult age groups in the city

# City of St. Louis – Department of Health Response (DOH)

- STD Strategic Plan with neighboring communities
- Successful 'Body & Soul' Teen education and outreach workshop in December 2007 and April 2009
- Establishment of the Youth Empowerment Advocates for Health Program
- Testing and counseling staff provide educational presentations at area schools
- Increased testing & Hepatitis vaccinations in the City Justice Center

## DOH Response cont.

- Increased mobile testing through partnering with ASC Cares Mobile Testing Unit and the Urban League
- Community collaboration on the teen oriented drop in clinic 'The Spot'
- Partnering with People's clinic for counseling and testing and disease investigation training
- Training city youth in the B.A.R.T. curriculum (Becoming a Responsible Teen), Summer 2009
- Partnership with Planned Parenthood on Parent Education

## Strategic Goals

- Increase STD testing and treatment by determining gaps in the community
- Prevent STD infection through targeted education and outreach
- Develop a comprehensive STD surveillance system
- Sustain working evidence-based interventions
- Evaluate progress by evaluating test statistics from the state and private labs
- Identify at-risk populations through data analysis

City of St. Louis National STD Rankings Among Leading U.S. Counties and Cities, 1997-2004

	Year	Chlamydia	Gonorrhea	Primary & Secondary	*Congenital Syphilis
				Syphilis	зурпшѕ
		Rank	Rank	Rank	Rank
l	1997	4	4	9	-
	1998	3	1	7	22
	1999	2	3	8	4
	2000	6	4	26	27
Ī	2001	3	2	23	10
Ī	2002	5	1	29	-
Ī	2003	5	1	23	-
	2004	2	1	5	-

† Rankings prior to 2005 were based on rate per 100,000. \*Congenital Syphilis has not been ranked since 2001

Source: Centers for Disease Control and Prevention – Annual STD Surveillance Summaries as Published

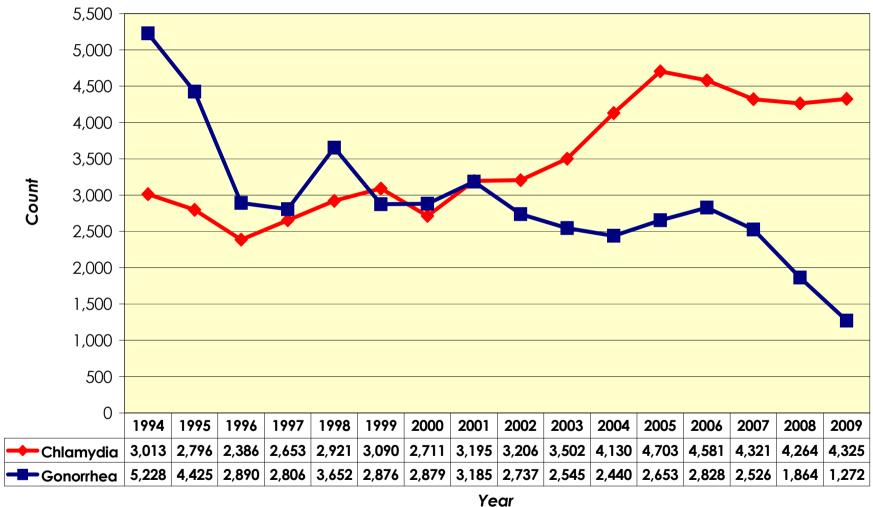
## St. Louis Metropolitan Statistical Area STD Rankings Among Selected \*MSAs, 2005-2008

Year	Chlam	nydia	Gonorrhea		Primary & Secondary Syphilis	
	Rate Rank	Count Rank	Rate Rank	Count Rank	Rate Rank	Count Rank
2005	5	10	5	8	38	31
2006	6	12	5	9	36	31
2007	8	16	8	11	27	23
2008	11	14	14	12	21	27

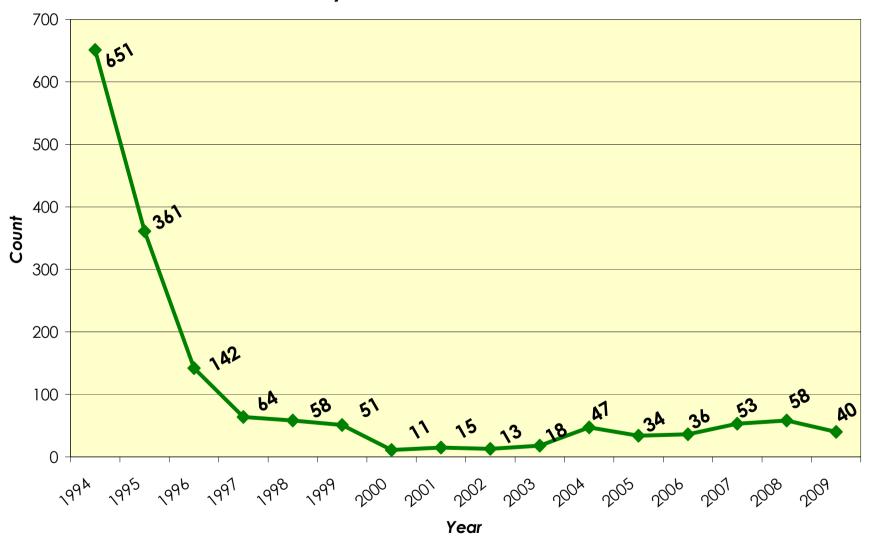
<sup>\*</sup>Metropolitan Statistical Areas were selected based on the largest population according to the 2000 U.S. Census, Definitions for MSAs are issued by the Office of Management and Budget (OMB) to be used in presentation of statistics by agencies of the federal government

**Source:** Centers for Disease Control and Prevention – Annual STD Surveillance Summaries as published

#### Count of Chlamydia and Gonorrhea Cases City of St. Louis 1994-2009



#### Count of Primary and Secondary Syphilis City of St. Louis 1994-2009



#### Chlamydia, Gonorrhea, & Syphilis Rates per 100,000 by Year City of St. Louis, 1994-2009

Year	Chlamydia		Gonorrhea		Primary and Secondary Syphilis		Early Latent Syphilis		Congenital Syphilis*°	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1994	3,013	818.3	5,228	1419.8	651	176.8	391	106.2	49	732.7
1995	2,796	779.5	4,425	1233.6	361	100.6	289	80.6	24	401.2
1996	2,386	683.1	2,890	827.4	142	40.7	136	38.9	8	137.6
1997	2,653	776.0	2,806	820.8	64	18.7	83	24.3	5	87.4
1998	2,921	860.8	3,652	1076.3	58	17.1	63	18.6	3	53.7
1999	3,090	882.5	2,876	821.3	51	14.6	40	11.4	5	90.9
2000	2,711	781.4	2,879	829.8	11	3.2	21	6.1	1	18.4
2001	3,195	932.1	3,185	929.2	15	4.4	15	4.4	4	75.9
2002	3,206	947.5	2,737	808.9	13	3.8	23	6.8	1	19.4
2003	3,502	1054.1	2,545	766.1	18	5.4	12	3.6	1	19.0
2004	4,130	1243.1	2,440	734.4	47	14.2	21	6.3	0	0.0
2005	4,703	1442.8	2,653	813.9	34	10.4	20	6.1	3	59.1
2006	4,581	1346.9	2,828	831.5	36	10.6	19	5.6	2	37.2
2007	4,321	1228.9	2,526	718.4	53	15.1	28	8.0	0	0.0
2008	4,264	1201.7	1,864	525.3	58	16.3	36	10.1	1	18.5
2009	4,325	1235.0	1,272	363.2	40	11.4	55	15.7	1	18.5

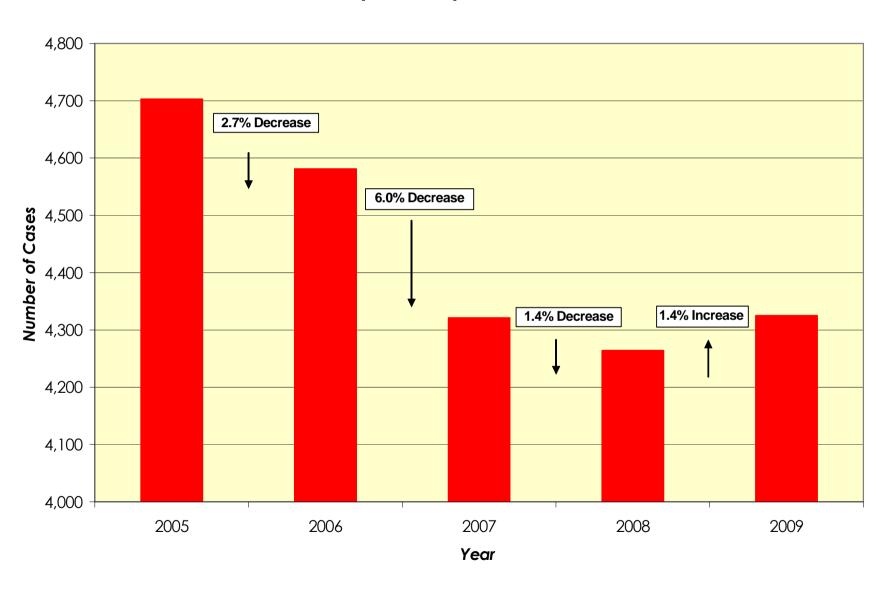
<sup>\*</sup> Congenital Syphilis rates per 100,000 Live Births; all other rates per 100,000 population

Source: 1994 - 2004: STD Surveillance Reports, Centers for Disease Control and Prevention website 2005 to 2009 from the Missouri Department of Health and Senior Services

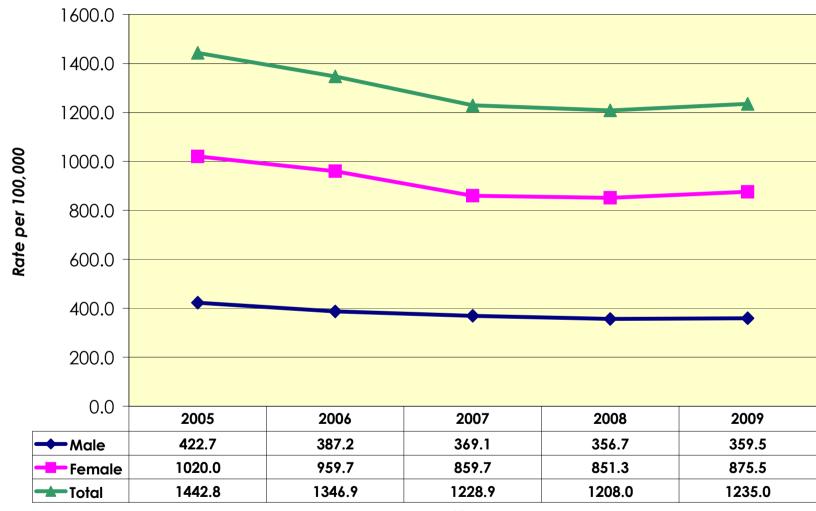
<sup>°</sup>Congenital Syphilis Rates for 08 and 09 are calculated using 2008 live birth data

## Chlamydia

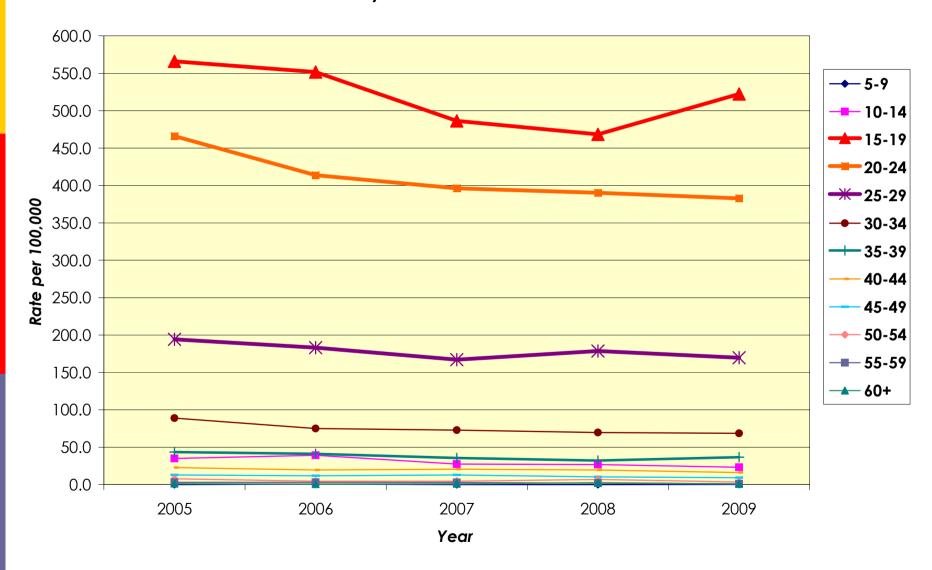
#### Cases of Chlamydia - City of St. Louis 2005-2009



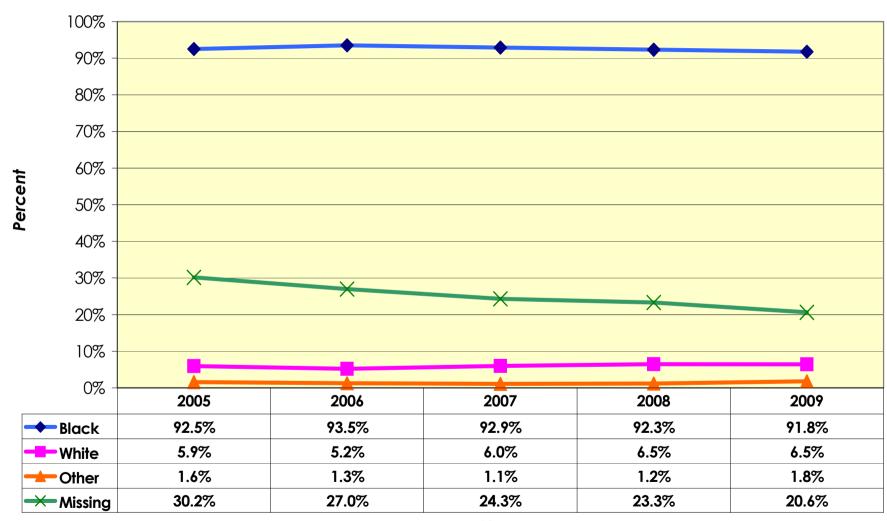
### Chlamydia Rates by Gender per 100,000 City Population City of St. Louis, 2005-2009



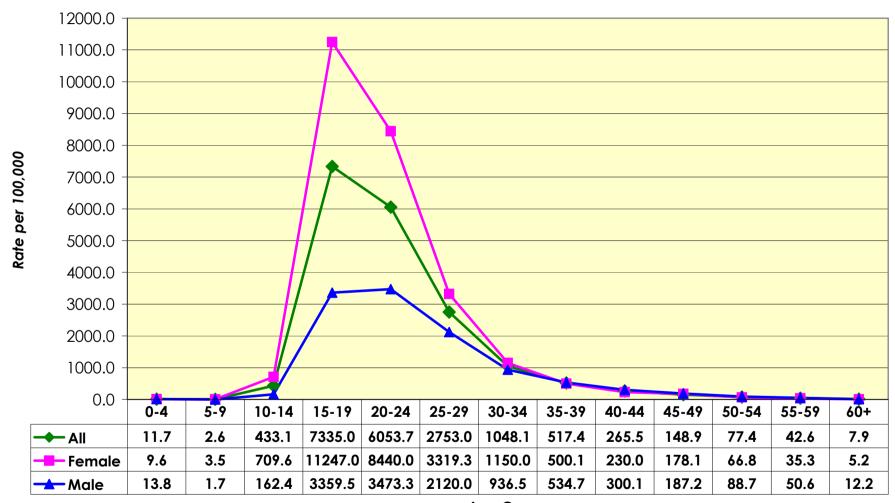
#### Chlamydia Rates by Age Group per 100,000 City Population City of St. Louis 2005-2009



#### Percent of Chlamydia Cases by Known Race City of St. Louis, 2005-2009

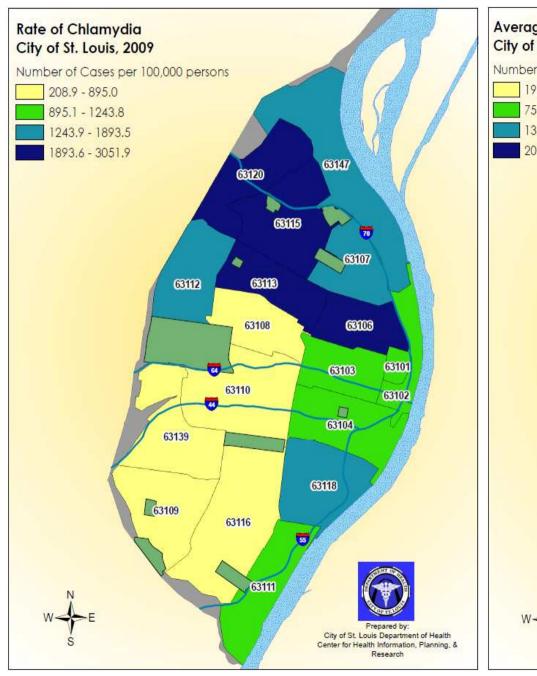


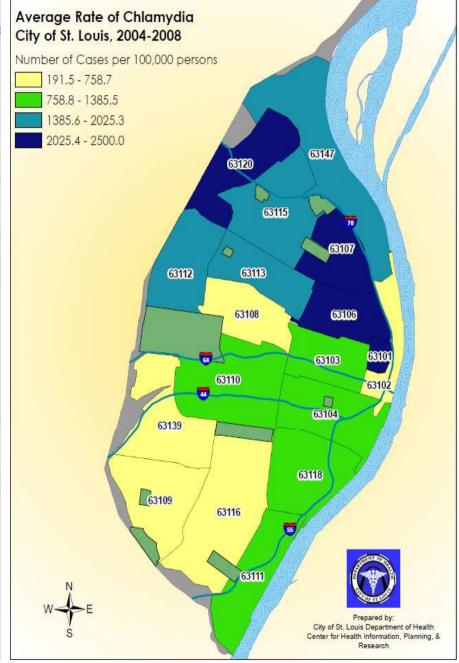
### Chlamydia Rates per 100,000 Population by Age Group and Gender City of St. Louis, 2005-2009 Five-Year Average



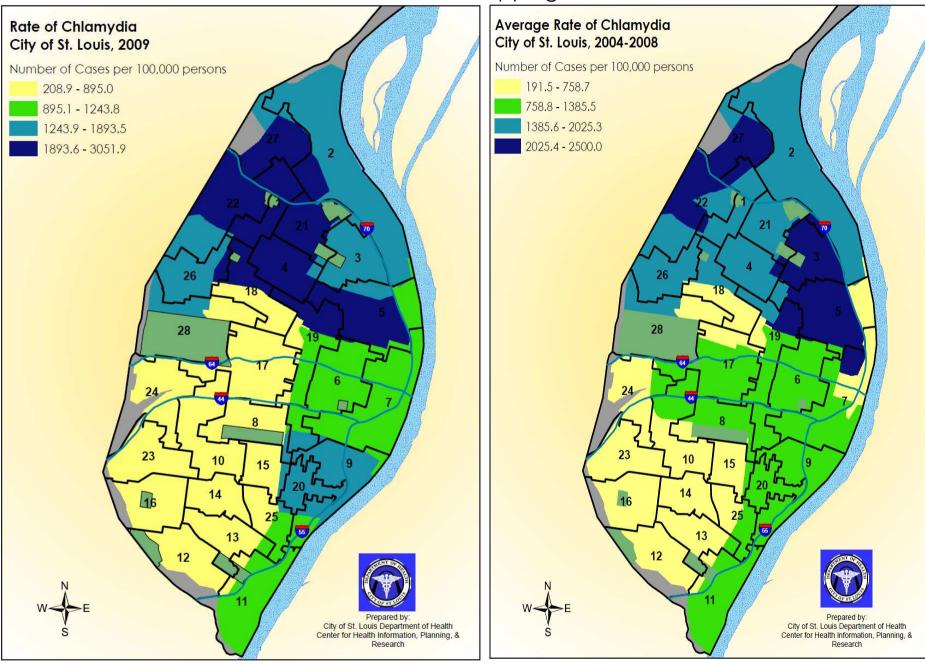
Age Group

#### Zip Code Mapping





Ward Mapping



## Chlamydia Compared

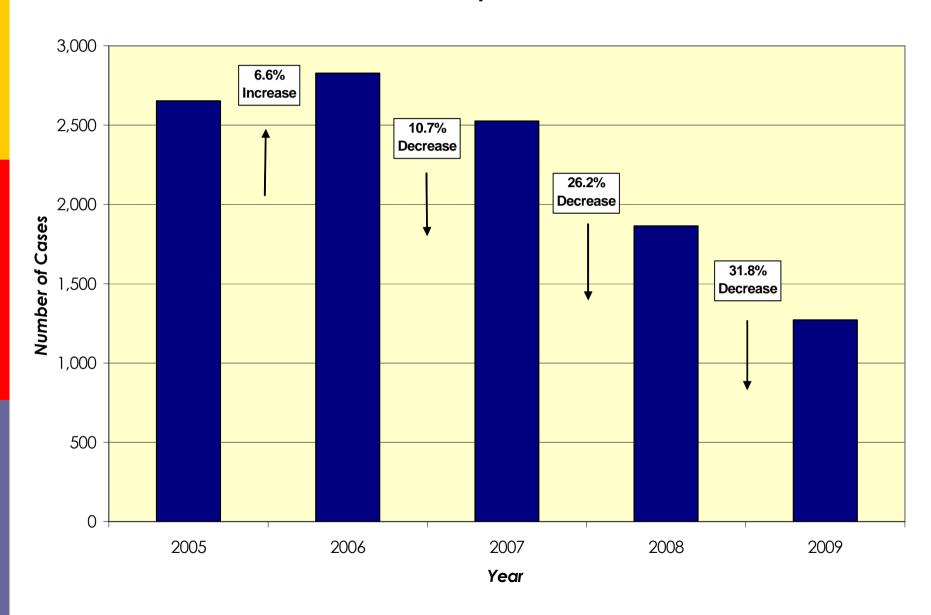
2004-2008 Average	2009
4386.8 cases	4325 cases
71.8% Female*	70.9% Female*
92.8% Black**	91.8% Black**
71.9% 15-24 age group	73.3% 15-24 age group
Highest rate by zip code:	Highest rate by zip code:
63106	63106
63120	63115
63107	63120

<sup>\*</sup>Screening is targeted to women of child bearing age to prevent infertility, a complication of untreated Chlamydia infection. However, screening among females and males became more widespread between 2003-2004

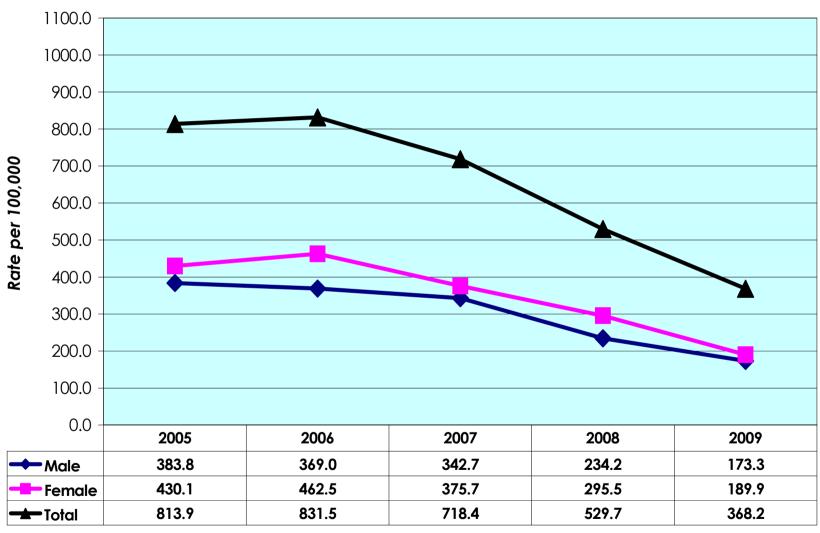
\*\* Percent taken among total cases with known race.

## Gonorrhea

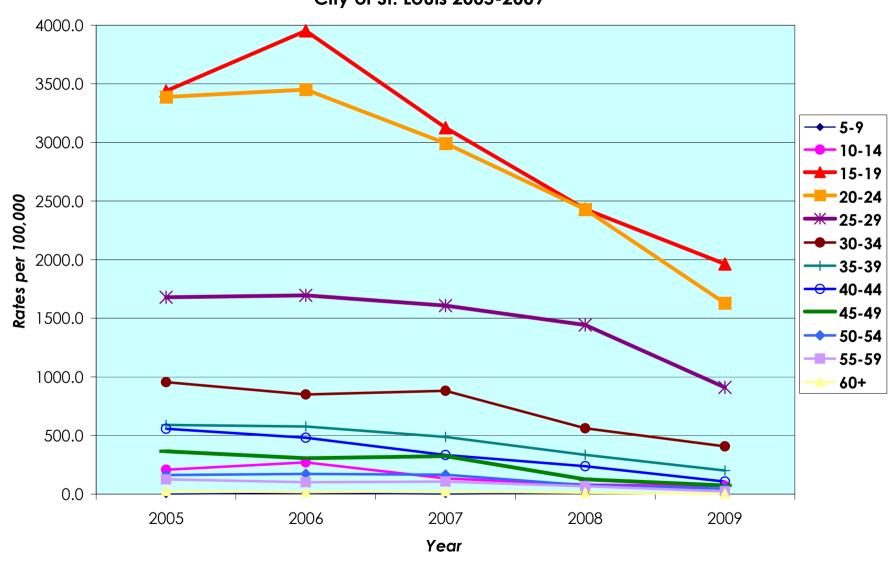
### Cases of Gonorrhea - City of St. Louis 2005-2009



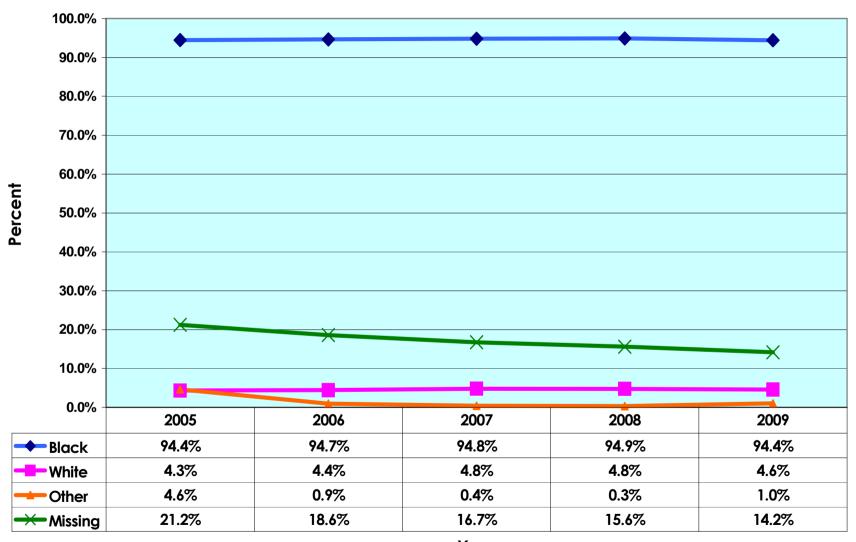
## Gonorrhea Rates by Gender per 100,000 City Population City of St. Louis 2005-2009



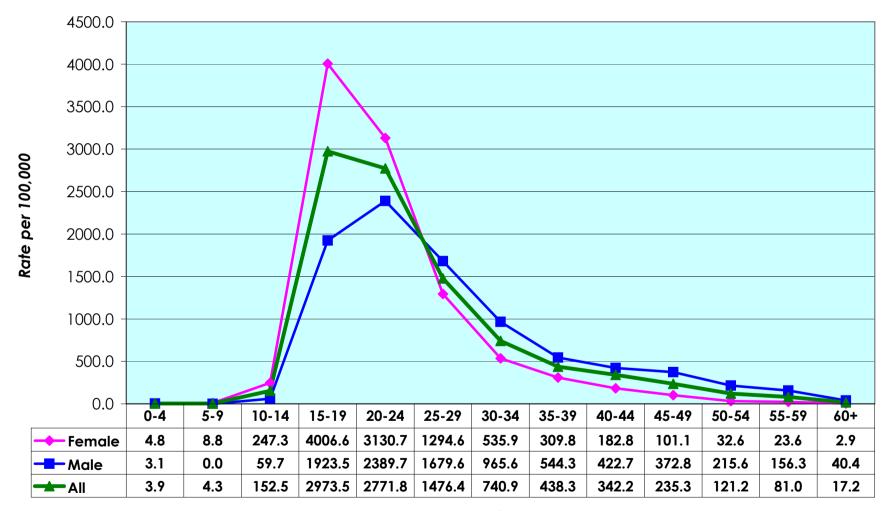
#### Gonorrhea Rates by Age Group per 100,000 City Population City of St. Louis 2005-2009



#### Percent of Gonorrhea Cases by Known Race, City of St. Louis 2005-2009

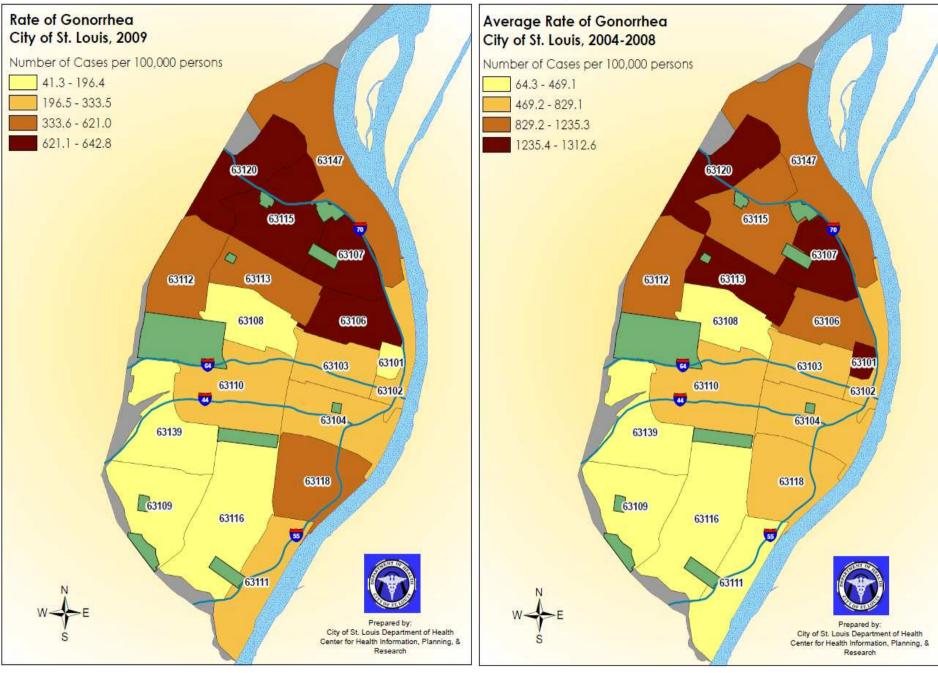


## Gonorrhea Rates per 100,000 City Population by Age Group and Gender - City of St. Louis, 2005-2009 Five-Year Average

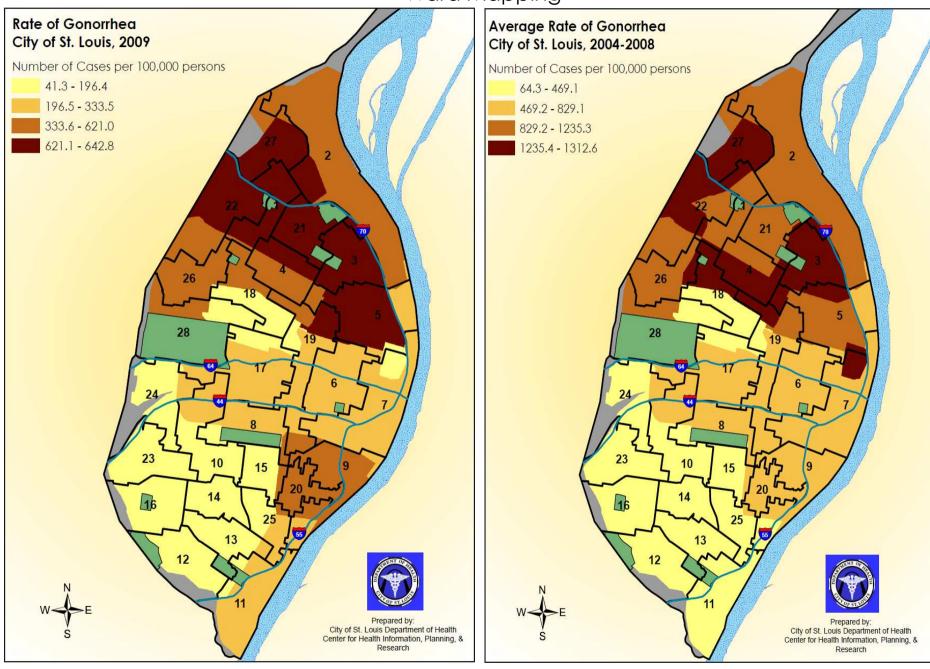


Age Group

#### Zip Code Mapping



Ward Mapping



## Gonorrhea Compared

2004-2008 Average	<u>2009</u>
2457.6 cases	1272 cases
54.1% Female	53.8% Female
95.5% Black*	94.4% Black*
60.2% 15-24 age group	67.1% 15-24 age group
Highest ZIP Codes:	Highest ZIP Codes:
63107	63120
63120	63115
63113	63107

<sup>\*</sup> Percent taken among total cases with known race.

## Female to Male Ratio of Cases by Year, City of St. Louis 2005-2009

Chlamydia

(all ages)

Year	Female	Male	Ratio
2005	3325	1378	2.4
2006	3264	1317	2.5
2007	3023	1298	2.3
2008	2959	1240	2.4
2009	3066	1259	2.4
Five Year Average	3127.4	1298.4	2.4

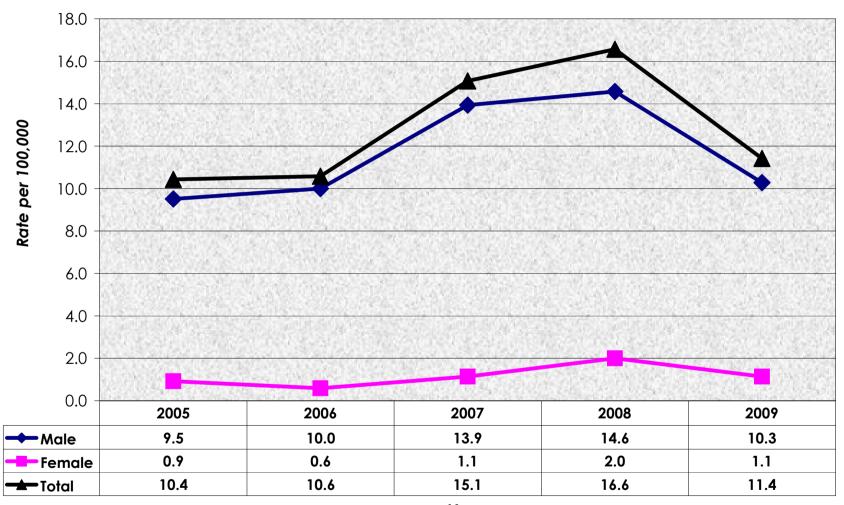
Gonorrhea

(all ages)

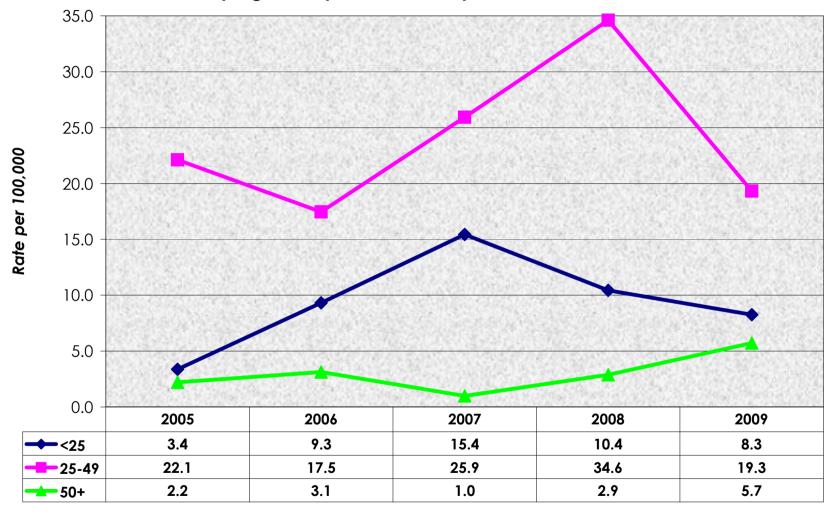
Year	Female	Male	Ratio
2005	1402	1251	1.1
2006	1573	1255	1.3
2007	1321	1205	1.1
2008	1027	814	1.3
2009	665	607	1.1
Five-Year Average	1197.6	1026.4	1.2

# Primary and Secondary Syphilis

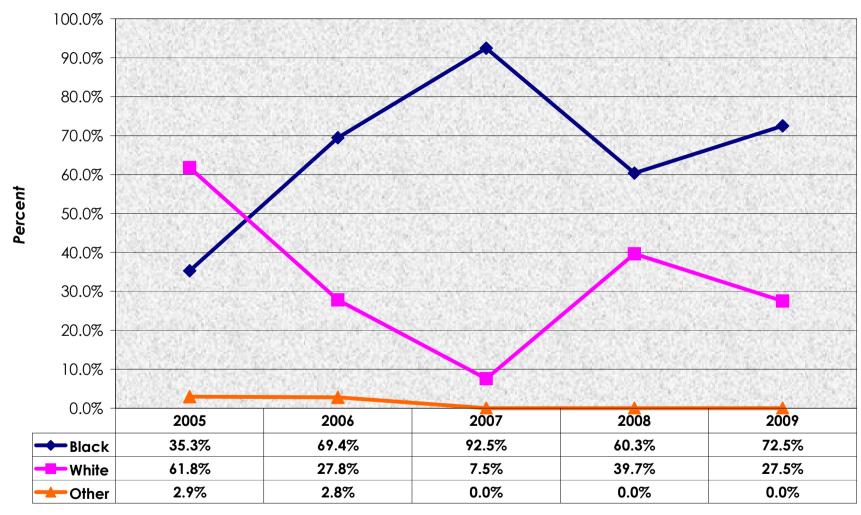
Primary & Secondary Syphilis Rates per 100,000 City Population by Gender and Year, City of St. Louis 2005-2009



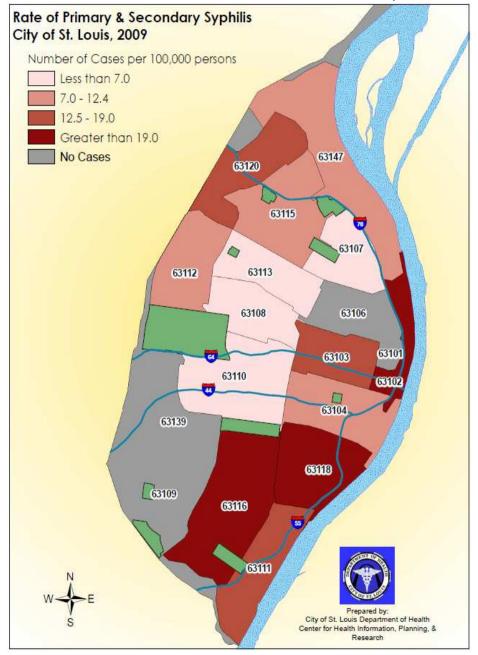
## Rates of Primary & Secondary Syphilis per 100,000 City Population by Age Group and Year, City of St. Louis 2005-2009

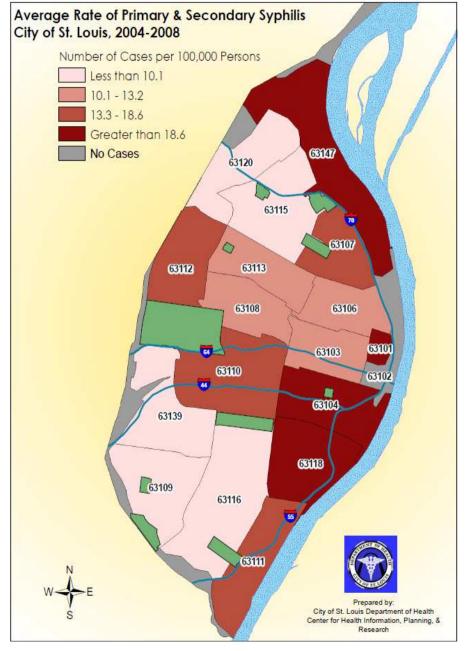


#### Percentage of Primary and Secondary Syphilis Cases by Race City of St. Louis 2005-2009

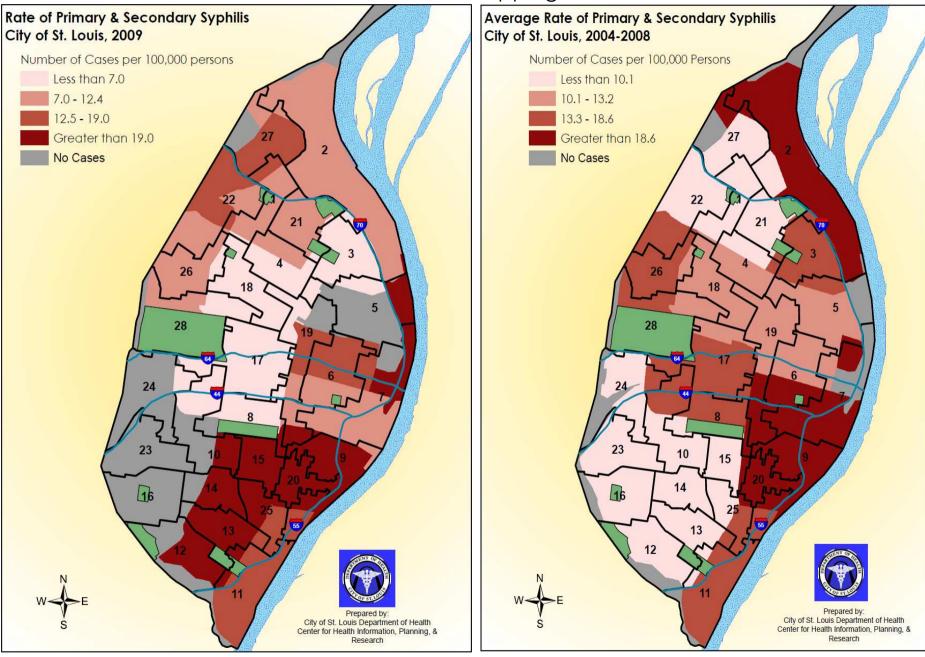


#### Zip Code Mapping





Ward Mapping



### Primary & Secondary Syphilis Compared

45.6 cases

89.4% Male

62.7% Black

71.5% 25-49 age group

Highest ZIP Codes:

63118

63147

63104

2009

40 cases

90% Male

60.3% Black

72.4% 25-49 age group

Highest ZIP Codes:

63118

63147

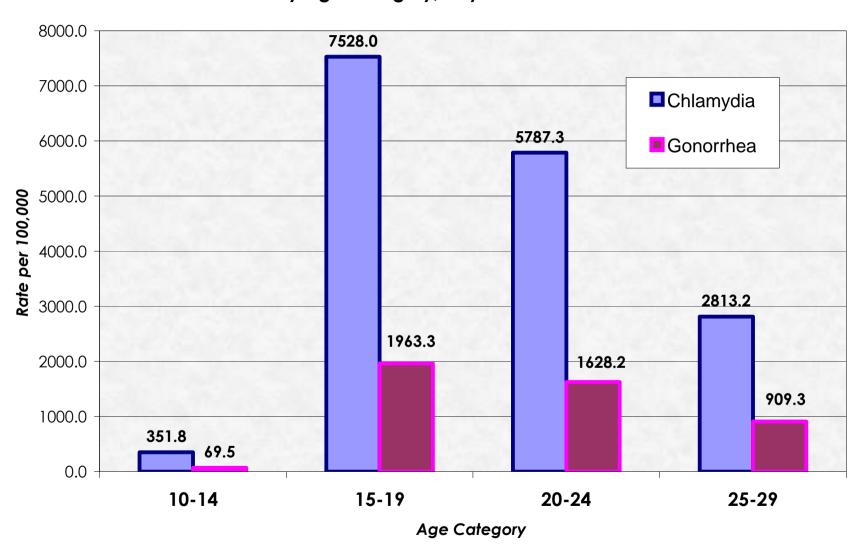
63106

# Male to Female Ratio of Primary and Secondary Syphilis Cases by Year, 2005-2009 City of St. Louis

Year	Male	Female	Ratio
2005	31	3	10.3
2006	34	2	17.0
2007	49	4	12.3
2008	51	7	7.3
2009	36	4	9.0
Five-Year Average	40.2	4	10.1

# Sexually Transmitted Disease in Youth and Young Adults

## Age-Specific Disease Rates per 100,000 Among Youth and Young Adults by Age Category, City of St. Louis 2009



## Female to Male Ratio of Cases by Year, City of St. Louis 2005-2009

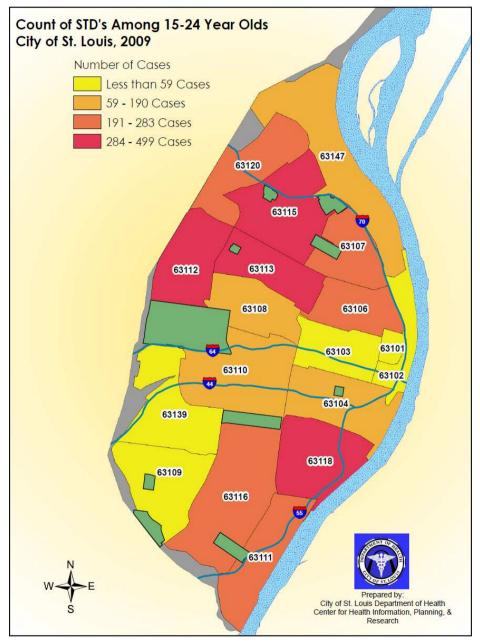
Chlamydia (Ages 15-19)

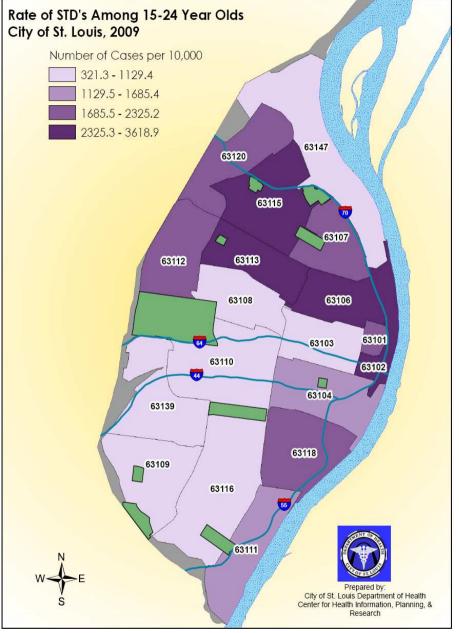
Year	Female	Male	Ratio
2005	1455	390	3.7
2006	1444	432	3.3
2007	1301	409	3.2
2008	1260	368	3.4
2009	1409	420	3.4
Five Year Average	1373.8	403.8	3.4

Gonorrhea (Ages 15-19)

Year	Female	Male	Ratio
2005	546	254	2.1
2006	671	277	2.4
2007	506	268	1.9
2008	421	183	2.3
2009	303	174	1.7
Five Year Average	489.4	231.2	2.1

#### Zip Code Mapping





#### Ward Mapping

